

WORKBOOK

STRENGTH OF MATERIALS 1

BMM1533



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SITI RABIATULL AISHA IDRIS
MAHADZIR ISHAK
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INTRODUCTION

This workbook consists of four chapters which are Stress and Strain under Axial Loading, Torsion, Pure Bending and Analysis and Design of Beams for Bending. There are brief, yet compact notes for students to understand better and at the same time easy to remember. In this workbook, student will learn on how to solve the engineering problems in the simplest way. It will also guide the students to answer the question in unique ways. By the end of the semester, students should be able to:

- CO1: Analyse the stress and strain problems in structural members.
- CO2: Analyse the circular and non-circular member problems which are subjected to twisting couples or torques.
- CO3: Analyse the stress and strain problems in members subjected to pure bending and transverse loading.
- CO4: Analyse and design of beams for bending.

There are exercises prepared for students in every chapter to enhance their understanding, and they need to submit them at the end of the lecture. As a conclusion, it is hoped that this workbook will be able help students to become a better learner.

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